

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: METALUX

Report Number: P#

Luminaire Tested: **4SNLED-LD5-76HL-SLC-UNV-L835-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P#
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P27404)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 4SNLED-LD5-76HL-SLC-UNV-L835-CD1-U
Description: 4FT LINEAR SNLED LED FIXTURE
CLEAR SQUARE LENS
Light Source: -
Ballast/Driver: -

Summary

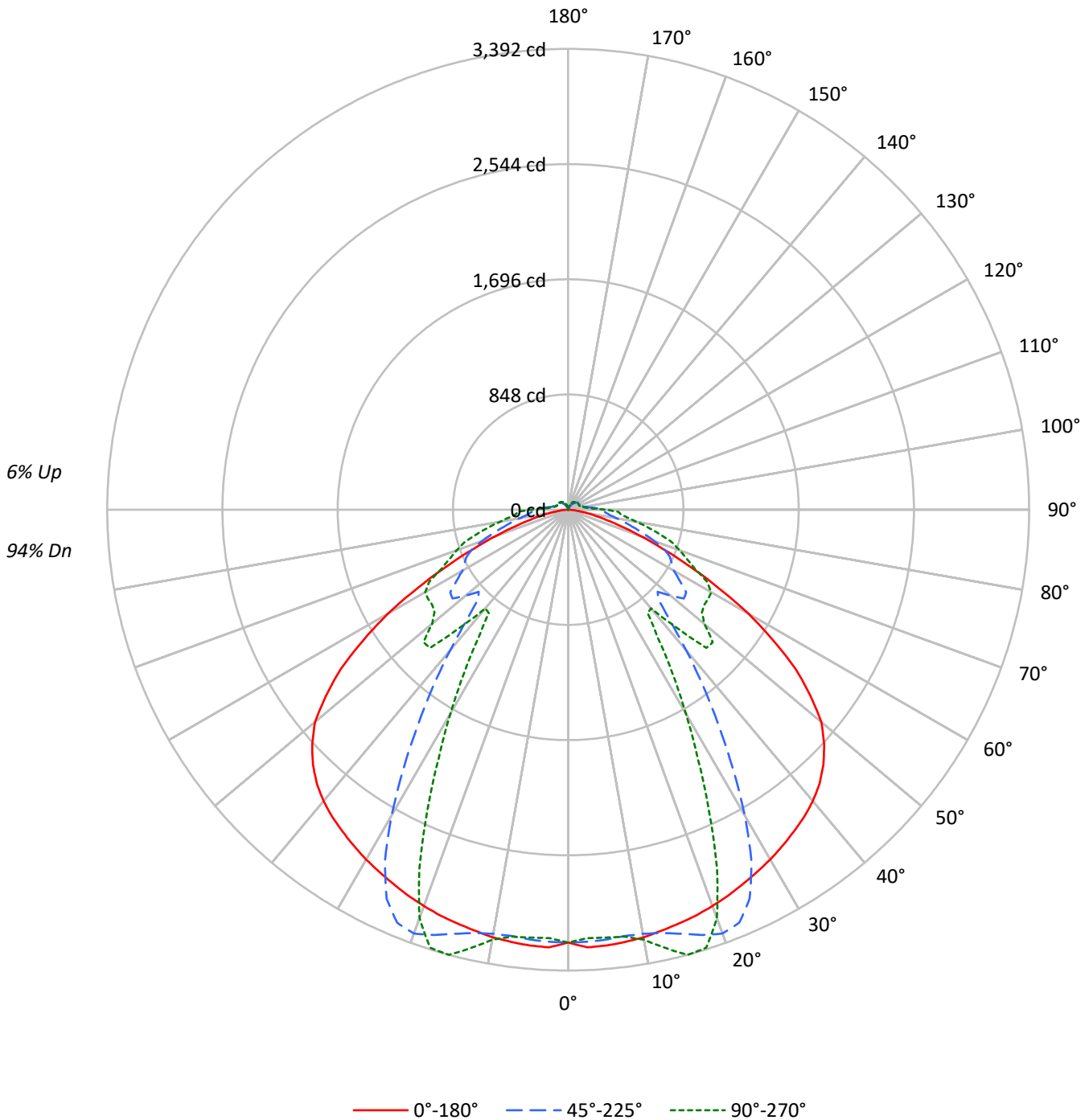
Lumens per Lamp: N/A
Luminaire Lumens: 8181.0 lumens
Efficiency: N/A
Efficacy: 132.0 lumens/watt
Spacing Criteria (0/90/45): 1.4 / 1 / 1.08
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')
CIE Type: Direct

Input Watts (W): 62
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P#
CATALOG NUMBER: 4SNLED-LD5-76HL-SLC-UNV-L835-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-76HL-SLC-UNV-L835-CD1-U

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

| | | | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|----|----|
| RF | 20 | | | | 20 | | | | 20 | | | | 20 | | | | 20 | |
| RC | 80 | | | | 70 | | | | 50 | | | | 30 | | | | 10 | 0 |
| RW | 70 | 50 | 30 | 10 | 70 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 0 |
| RCR | | | | | | | | | | | | | | | | | | |
| 0 | 118 | 118 | 118 | 118 | 114 | 114 | 114 | 114 | 108 | 108 | 108 | 102 | 102 | 102 | 97 | 97 | 97 | 94 |
| 1 | 107 | 102 | 98 | 94 | 104 | 99 | 95 | 92 | 94 | 91 | 88 | 89 | 87 | 84 | 85 | 83 | 81 | 78 |
| 2 | 98 | 90 | 83 | 77 | 95 | 87 | 81 | 76 | 83 | 78 | 73 | 79 | 74 | 71 | 75 | 71 | 68 | 66 |
| 3 | 89 | 79 | 71 | 65 | 87 | 77 | 70 | 64 | 73 | 67 | 62 | 70 | 65 | 60 | 67 | 62 | 59 | 56 |
| 4 | 82 | 71 | 62 | 56 | 80 | 69 | 61 | 55 | 66 | 59 | 53 | 63 | 57 | 52 | 60 | 55 | 51 | 49 |
| 5 | 76 | 63 | 55 | 48 | 74 | 62 | 54 | 48 | 59 | 52 | 47 | 57 | 51 | 46 | 54 | 49 | 45 | 43 |
| 6 | 70 | 58 | 49 | 43 | 68 | 56 | 48 | 42 | 54 | 47 | 41 | 52 | 45 | 41 | 50 | 44 | 40 | 38 |
| 7 | 66 | 52 | 44 | 38 | 64 | 51 | 43 | 38 | 49 | 42 | 37 | 47 | 41 | 36 | 46 | 40 | 36 | 34 |
| 8 | 61 | 48 | 40 | 34 | 59 | 47 | 39 | 34 | 45 | 38 | 33 | 44 | 37 | 33 | 42 | 37 | 32 | 30 |
| 9 | 57 | 44 | 36 | 31 | 56 | 44 | 36 | 31 | 42 | 35 | 30 | 41 | 34 | 30 | 39 | 34 | 29 | 28 |
| 10 | 54 | 41 | 33 | 28 | 52 | 40 | 33 | 28 | 39 | 32 | 28 | 38 | 32 | 27 | 37 | 31 | 27 | 25 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 25736 | 25736 | 25736 |
| 5° | 26049 | 25134 | 24825 |
| 10° | 26082 | 24751 | 24739 |
| 15° | 26154 | 25100 | 25784 |
| 20° | 26396 | 25847 | 24203 |
| 25° | 26725 | 24840 | 18636 |
| 30° | 27253 | 20805 | 13255 |
| 35° | 27929 | 15757 | 8976 |
| 40° | 28781 | 11454 | 7600 |
| 45° | 29435 | 8309 | 11949 |
| 50° | 29476 | 9200 | 11340 |
| 55° | 27551 | 10589 | 11198 |
| 60° | 23475 | 9690 | 11903 |
| 65° | 17661 | 9772 | 10888 |
| 70° | 12394 | 8895 | 10134 |
| 75° | 8120 | 7452 | 9094 |
| 80° | 5182 | 6384 | 7569 |
| 85° | 2794 | 6070 | 6795 |



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-76HL-SLC-UNV-L835-CD1-U

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 303.0 | 3.7 |
| 10°-20° | 915.0 | 11.2 |
| 20°-30° | 1329.2 | 16.2 |
| 30°-40° | 1270.0 | 15.5 |
| 40°-50° | 1161.7 | 14.2 |
| 50°-60° | 1072.6 | 13.1 |
| 60°-70° | 852.0 | 10.4 |
| 70°-80° | 525.9 | 6.4 |
| 80°-90° | 286.4 | 3.5 |
| 90°-100° | 144.7 | 1.8 |
| 100°-110° | 90.9 | 1.1 |
| 110°-120° | 77.0 | 0.9 |
| 120°-130° | 62.9 | 0.8 |
| 130°-140° | 45.1 | 0.6 |
| 140°-150° | 27.8 | 0.3 |
| 150°-160° | 13.2 | 0.2 |
| 160°-170° | 3.4 | 0.0 |
| 170°-180° | 0.0 | 0.0 |
| 0°-30° | 2547.2 | 31.1 |
| 0°-40° | 3817.2 | 46.7 |
| 0°-60° | 6051.5 | 74.0 |
| 0°-90° | 7715.8 | 94.3 |
| 90°-120° | 312.7 | 3.8 |
| 90°-150° | 448.6 | 5.5 |
| 90°-180° | 465.0 | 5.7 |
| 0°-180° | 8181.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 3185 | 3185 | 3185 | 3185 | 3185 | |
| 5° | 3220 | 3171 | 3176 | 3159 | 3161 | 306 |
| 15° | 3152 | 3110 | 3231 | 3351 | 3392 | 892 |
| 25° | 3041 | 3100 | 3159 | 2674 | 2456 | 1406 |
| 35° | 2893 | 2846 | 1919 | 1321 | 1149 | 1814 |
| 45° | 2656 | 1852 | 936 | 1194 | 1438 | 2041 |
| 55° | 2043 | 950 | 1060 | 1140 | 1221 | 1799 |
| 65° | 986 | 616 | 826 | 1004 | 1028 | 997 |
| 75° | 290 | 328 | 495 | 656 | 699 | 329 |
| 85° | 41 | 140 | 281 | 382 | 388 | 52 |
| 90° | 1 | 104 | 251 | 298 | 275 | 2 |
| 95° | 0 | 97 | 173 | 154 | 145 | 0 |
| 105° | 0 | 87 | 107 | 97 | 96 | 0 |
| 115° | 0 | 72 | 103 | 92 | 87 | 1 |
| 125° | 1 | 58 | 92 | 89 | 85 | 1 |
| 135° | 1 | 41 | 73 | 80 | 78 | 1 |
| 145° | 1 | 25 | 51 | 65 | 69 | 1 |
| 155° | 3 | 16 | 31 | 41 | 49 | 1 |
| 165° | 3 | 8 | 16 | 20 | 27 | 1 |
| 175° | 0 | 0 | 0 | 0 | 0 | 0 |
| 180° | 0 | 0 | 0 | 0 | 0 | 0 |



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-76HL-SLC-UNV-L835-CD1-U

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 3184.8 | 3184.8 | 3184.8 | 3184.8 | 3184.8 |
| 2.5° | 3224.3 | 3177.7 | 3183.4 | 3173.5 | 3156.6 |
| 5° | 3220.0 | 3170.7 | 3176.3 | 3159.4 | 3160.8 |
| 7.5° | 3208.8 | 3158.0 | 3165.0 | 3162.2 | 3169.3 |
| 10° | 3196.1 | 3142.5 | 3169.3 | 3193.2 | 3214.4 |
| 12.5° | 3173.5 | 3125.6 | 3190.4 | 3260.9 | 3304.6 |
| 15° | 3152.4 | 3110.1 | 3231.3 | 3351.1 | 3392.0 |
| 17.5° | 3131.2 | 3104.4 | 3282.1 | 3386.4 | 3380.8 |
| 20° | 3104.4 | 3101.6 | 3320.1 | 3284.9 | 3198.9 |
| 22.5° | 3074.8 | 3103.0 | 3290.5 | 3032.5 | 2863.3 |
| 25° | 3041.0 | 3100.2 | 3159.4 | 2674.4 | 2455.9 |
| 27.5° | 3007.1 | 3087.5 | 2921.1 | 2282.5 | 2066.8 |
| 30° | 2973.3 | 3053.7 | 2599.7 | 1924.4 | 1728.4 |
| 32.5° | 2933.8 | 2980.4 | 2250.1 | 1607.2 | 1426.7 |
| 35° | 2893.0 | 2846.4 | 1918.8 | 1321.0 | 1149.0 |
| 37.5° | 2850.7 | 2653.3 | 1621.3 | 1070.1 | 960.1 |
| 40° | 2799.9 | 2410.8 | 1347.8 | 917.8 | 947.4 |
| 42.5° | 2736.5 | 2137.3 | 1106.7 | 962.9 | 1168.7 |
| 45° | 2656.1 | 1852.5 | 936.1 | 1194.1 | 1438.0 |
| 47.5° | 2554.6 | 1579.0 | 893.8 | 1367.5 | 1443.7 |
| 50° | 2431.9 | 1328.1 | 982.6 | 1311.1 | 1305.5 |
| 52.5° | 2245.8 | 1119.4 | 1072.9 | 1195.5 | 1240.6 |
| 55° | 2042.8 | 950.2 | 1060.2 | 1140.5 | 1220.9 |
| 57.5° | 1786.2 | 836.0 | 972.8 | 1129.3 | 1222.3 |
| 60° | 1531.1 | 759.9 | 898.1 | 1127.9 | 1215.3 |
| 62.5° | 1249.1 | 690.8 | 860.0 | 1101.1 | 1153.2 |
| 65° | 985.5 | 616.1 | 826.2 | 1003.8 | 1027.8 |
| 67.5° | 755.7 | 540.0 | 766.9 | 895.2 | 943.2 |
| 70° | 569.6 | 465.2 | 673.9 | 812.1 | 871.3 |
| 72.5° | 410.3 | 394.7 | 578.0 | 738.7 | 800.8 |
| 75° | 290.4 | 328.5 | 494.8 | 655.6 | 699.3 |
| 77.5° | 200.2 | 267.9 | 424.4 | 563.9 | 599.2 |
| 80° | 131.1 | 214.3 | 360.9 | 485.0 | 508.9 |
| 82.5° | 78.9 | 172.0 | 313.0 | 424.4 | 437.0 |
| 85° | 40.9 | 139.6 | 280.6 | 382.1 | 387.7 |
| 87.5° | 12.7 | 117.0 | 262.2 | 362.3 | 369.4 |
| 90° | 1.4 | 104.3 | 250.9 | 297.5 | 274.9 |
| 92.5° | 0.0 | 98.7 | 217.1 | 203.0 | 181.9 |
| 95° | 0.0 | 97.3 | 173.4 | 153.7 | 145.2 |
| 97.5° | 0.0 | 94.5 | 142.4 | 128.3 | 124.1 |
| 100° | 0.0 | 91.6 | 122.7 | 112.8 | 111.4 |
| 102.5° | 0.0 | 90.2 | 111.4 | 102.9 | 101.5 |
| 105° | 0.0 | 87.4 | 107.1 | 97.3 | 95.9 |
| 107.5° | 0.0 | 83.2 | 104.3 | 94.5 | 91.6 |
| 110° | 0.0 | 78.9 | 104.3 | 93.0 | 88.8 |



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-76HL-SLC-UNV-L835-CD1-U

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-----|-------|-------|-------|------|
| 112.5° | 0.0 | 74.7 | 104.3 | 91.6 | 87.4 |
| 115° | 0.0 | 71.9 | 102.9 | 91.6 | 87.4 |
| 117.5° | 1.4 | 69.1 | 101.5 | 91.6 | 87.4 |
| 120° | 0.0 | 66.3 | 98.7 | 91.6 | 86.0 |
| 122.5° | 1.4 | 62.0 | 95.9 | 90.2 | 86.0 |
| 125° | 1.4 | 57.8 | 91.6 | 88.8 | 84.6 |
| 127.5° | 1.4 | 53.6 | 87.4 | 86.0 | 81.8 |
| 130° | 1.4 | 49.3 | 83.2 | 84.6 | 80.4 |
| 132.5° | 1.4 | 45.1 | 77.5 | 81.8 | 78.9 |
| 135° | 1.4 | 40.9 | 73.3 | 80.4 | 77.5 |
| 137.5° | 1.4 | 36.7 | 67.7 | 76.1 | 76.1 |
| 140° | 1.4 | 32.4 | 62.0 | 73.3 | 74.7 |
| 142.5° | 1.4 | 29.6 | 56.4 | 70.5 | 71.9 |
| 145° | 1.4 | 25.4 | 50.8 | 64.9 | 69.1 |
| 147.5° | 1.4 | 22.6 | 45.1 | 59.2 | 64.9 |
| 150° | 1.4 | 19.7 | 39.5 | 53.6 | 59.2 |
| 152.5° | 1.4 | 16.9 | 35.2 | 46.5 | 55.0 |
| 155° | 2.8 | 15.5 | 31.0 | 40.9 | 49.3 |
| 157.5° | 2.8 | 12.7 | 25.4 | 35.2 | 42.3 |
| 160° | 2.8 | 11.3 | 22.6 | 29.6 | 38.1 |
| 162.5° | 2.8 | 9.9 | 18.3 | 25.4 | 32.4 |
| 165° | 2.8 | 8.5 | 15.5 | 19.7 | 26.8 |
| 167.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 170° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 172.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 175° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 177.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 180° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)